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09/896,563	06/28/2001	Tony G. Hamilton	ITL.1798US (P11843)	7969
47795	7590	01/09/2008	EXAMINER	
TROP, PRUNER & HU, P.C. 1616 S. VOSS RD., SITE 750 HOUSTON, TX 77057-2631			JEAN GILLES, JUDE	
			ART UNIT	PAPER NUMBER
			2143	
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**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

## Office Action Summary

Application No.

09/896,563

Applicant(s)

HAMILTON ET AL.

Examiner

Jude J. Jean-Gilles

Art Unit

2143

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☒ Responsive to communication(s) filed on 22 October 2007.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 1-40 is/are pending in the application.
- 4a) Of the above claim(s) 1-16 is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 17-40 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 28 June 2001 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
  - ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

### Attachment(s)

- ☒ Notice of References Cited (PTO-892)
- ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- ☐ Information Disclosure Statement(s) (PTO/SB/08)  
Paper No(s)/Mail Date \_\_\_\_\_
- ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date. \_\_\_\_\_
- ☐ Notice of Informal Patent Application
- ☐ Other: \_\_\_\_\_

### DETAILED ACTION

1. This office action is responsive to communication filed on 10/22/2007.

The Examiner thanks Applicants for filing the Appeal Brief on 10/22/2007. In response to Applicant's arguments, the Examiner thinks that the prior art of record is moot is light of the Appellants main point of contention. However new patents of Kostadinov and Mishler are combined below to address the limitations of the claimed invention.

Prosecution is reopened and this Office Action is Non-Final.

2. In the claims, claims 1-16 are cancelled. Claims 17-40 are pending and represent a "METHOD TO PROVIDE DIRECT SYSTEM STORAGE ACCESS WITHIN A NOTEBOOK COMPUTER VIA A WIRELESS INTERCONNECT AND A LOW POWER HIGH-SPEED DATA MANAGEMENT BUS WHILE THE MAIN CPU IS IDLE.

### ***Claim Rejections - 35 USC § 103***

3. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

4. **Claims 17-40** are rejected under 35 U.S.C. 103(a) as being unpatentable over Kostadinov, U.S. Pub. 2007/0234339 A1 in view of Mishler, U.S. Patent No 5,283,883.

Regarding **claim 17**, Kostadinov teaches the invention substantially as claimed.

Kostadinov discloses a method, comprising:

activating an idle storage device in a computer system to transfer data while a main processor of the computer is idle (*Abstract; see that ...the memory activation must occur while the microprocessor is not performing application execution, application input/output, or application communications...and it is conceivable that the microprocessor is idle as it is inactive, not performing any tasks while the memory, the storage device being activated for data transfer; see also par. 0056*);

executing the data transfer (see abstract, see also par. 0056).

Although Kostadinov teaches substantial features of the claimed invention, Kostadinov does not distinctly disclose "returning system resources to an idle state". Nonetheless this feature is well known and would have been an obvious modification to the system shown by Kostadinov as evidenced by Mishler.

In an analogous art, Mishler shows a Direct Memory Access (DMA) Controller capable of activating and deactivating system resources. Specifically, Mishler teaches a method of transferring data bytes out of the memory, and upon a completion of the data bytes transfer from the memory to one of the buffer lines, returns the system's resources to the idle state (see Mishler, column 11, lines 21-26).

Given this feature, a person of ordinary skill in the art would have readily recognized the desirability and advantages of modifying the system shown Kostadinov to employ the features shown by Mishler in order to facilitates cooperative asynchronous reading and writing of data into a system's plurality of elements (see

Mishler, column 2, lines 11-13). DMA controllers are used to help control access to system's memory resources as demonstrated by the system of Mishler. By this rationale, claim 17 is rejected.

18. (Previously Presented) The method of claim 17, further comprising:  
buffering the data for transfer (see Mishler, column 2, lines 1-13). The same motivation and reason to combine utilized for the rejection of claim 17 is also valid for this claim.

19. (Previously Presented) The method of claim 17, further comprising:  
detecting a request for data transfer to activate the idle storage device while the main processor of the computer is idle (see Kostadinov, abstract, see also par. 0056).

20. (Previously Presented) The method of claim 19, wherein a controller activates the idle storage device by directing power to the device (see Mishler, fig. 1, item 20). The same motivation and reason to combine utilized for the rejection of claim 17 is also valid for this claim.

21. (Previously Presented) The method of claim 17, further comprising:  
tagging the transferred data for recognition (see Kostadinov, abstract, see also par. 0056).

22. (Previously Presented) The method of claim 17, further comprising:  
apportioning a system time and power resource based on the transferred data (see Kostadinov, abstract, see also par. 0056).

23. (Previously Presented) The method of claim 22, further comprising:  
returning the system resource to a pre-transfer state (see Mishler, column 11, lines 21-26).

24. (Previously Presented) The method of claim 17, further comprising:  
notifying a user of the computer system of the data transfer after the system is returned to an idle state (see Kostadinov, par. 0037; 0056).

25. (Previously Presented) The method of claim 17, wherein the data is transferred wirelessly (see Kostadinov, par. 0006; note that the Fieldbus can be used to transfer data within a wireless LAN).

26. (Previously Presented) The method of claim 17, wherein the data is transferred via a low level data bus (see Kostadinov, see fig. 1).

27. (Previously Presented) An apparatus comprising:  
means for activating an idle storage device in a computer system to transfer data while a main processor of the computer is idle (see Kostadinov, abstract, see also par.

0056);

means for executing the data transfer (see Kostadinov, abstract, see also par. 0056);

and

means for returning system resources to an idle state (see Mishler, column 11, lines 21-26).

28. (Previously Presented) The apparatus of claim 27, further comprising:

means for buffering the data for transfer (see Mishler, column 2, lines 1-13). The same motivation and reason to combine utilized for the rejection of claim 17 is also valid for this claim.

29. (Previously Presented) The apparatus of claim 27, wherein the means for activating the idle storage device comprise a controller that detects a request for data transfer while the main processor of the computer is idle (see Mishler, fig. 1, item 20). The same motivation and reason to combine utilized for the rejection of claim 17 is also valid for this claim.

30. (Previously Presented) The apparatus of claim 29, wherein the controller activates the idle storage device by directing power to the device (see Mishler, fig. 1, item 20).

The same motivation and reason to combine utilized for the rejection of claim 17 is also valid for this claim.

31. (Previously Presented) The apparatus of claim 27, wherein the data is transferred wirelessly (see Kostadinov, par. 0006; note that the Fieldbus can be used to transfer data within a wireless LAN).

32. (Previously Presented) The apparatus of claim 27, wherein the data is transferred via a low level data bus (see Kostadinov, see fig. 1).

33. (Previously Presented) A machine-readable medium having executable instructions to cause a processor to perform a method, the method comprising:  
activating an idle storage device in a computer system to transfer data while a main processor of the computer is idle (see Kostadinov, abstract, see also par. 0056);  
executing the data transfer (see Kostadinov, abstract, see also par. 0056); and  
returning system resources to an idle state (see Mishler, column 11, lines 21-26).

34. (Previously Presented) The machine-readable medium of claim 33, wherein the method further comprises:  
buffering the data for transfer (see Mishler, column 2, lines 1-13). The same motivation and reason to combine utilized for the rejection of claim 17 is also valid for this claim.

35. (Previously Presented) The machine-readable medium of claim 34, wherein the idle storage device is activated by a controller that detects a request for data transfer while



the main processor of the computer is idle (see Mishler, fig. 1, item 20). The same motivation and reason to combine utilized for the rejection of claim 17 is also valid for this claim.

36. (Previously Presented) The machine-readable medium of claim 33, wherein the method further comprises:

apportioning a system resource based on the transferred data (see Kostadinov, abstract, see also par. 0056).

37. (Previously Presented) The machine-readable medium of claim 36, wherein the method further comprises:

returning the system resource to a pre-transfer state (see Mishler, column 11, lines 21-26).

38. (Previously Presented) A computer system comprising:

a processor coupled to a memory through a bus (see Kostadinov, fig. 1);

a unit to activate a storage device in a computer system to transfer data while the processor is idle, the unit to execute the data transfer (see Kostadinov, abstract, see also par. 0056), and the unit to

return system resources to an idle state (see Mishler, column 11, lines 21-26).

39. (Previously Presented) The system of claim 38, further including a buffer to store data to be transferred (see Mishler, column 2, lines 1-13). The same motivation and reason to combine utilized for the rejection of claim 17 is also valid for this claim.

40. (Previously Presented) The system of claim 38, further including a unit to detect a request for data transfer to activate the idle storage device while the main processor of the computer is idle (see Kostadinov, abstract, see also par. 0056).

**Conclusion**

5. **THIS ACTION IS MADE NON-FINAL.** Any inquiry concerning this communication or earlier communications from examiner should be directed to Jude Jean-Gilles whose telephone number is (571) 272-3914. The examiner can normally be reached on Monday-Thursday and every other Friday from 8:00 AM to 5:30 PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Flynn Nathan, can be reached on (571) 272-1915. The fax phone number for the organization where this application or proceeding is assigned is 571-273-3201.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (571) 272-0800.

Jude Jean-Gilles

Patent Examiner

Art Unit 2143

JJG

January 05, 2008